Appln. No. 10/657,249 Amd. dated December 21, 2007 Reply to Office Action of August 24, 2007

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:
Listing of Claims:

- 1. (Cancelled)
- 2. (Withdrawn) A method for detecting at least one organophosphorus or carbamate compound in a sample comprising contacting said sample with enzyme acetylcholinesterase immobilized in a sol-gel or a membrane, wherein the enzyme is inhibited by at least one of the organophosphorus or carbamate compounds.
- 3. (Withdrawn) The method according to claim 2 wherein the sample is contacted with acetylcholinesterase immobilized in a sol-gel or a membrane wherein the pH ranges from about 5.95 to about 11.52.
- 4. (Withdrawn) The method according to claim 2 wherein the compound detected is an organophosphorus compound and 1% bromine is added to the organophosphorus compound prior to addition to the immobilized enzyme.
- 5. (Withdrawn) The method according to claim 2 wherein the enzyme is immobilized in a sol-gel.

Appln. No. 10/657,249 Amd. dated December 21, 2007 Reply to Office Action of August 24, 2007

- 6. (Withdrawn) The method according to claim 2 wherein the enzyme is immobilized in a membrane.
 - 7. (Cancelled)
- 8. (Previously Presented) The detector according to claim 19 wherein the acetylcholinesterase is immobilized in a sol-gel.
- 9. (Previously Presented) The detector according to claim 19 wherein the acetylcholinesterase is immobilized in a membrane.
- 10. (Currently Amended) The detector according to claim 19 wherein the package comprises a semipermeable polyethylene bag that contains the membrane or sol-gel immobilized acetylcholinesterase, which semipermeable polyethylene bag is <u>capable of being</u> opened after exposure to the acetylcholinesterase inhibitor to commence the enzyme assay.
- 11. (Previously Presented) The detector according to claim 19 wherein the sol-gel is glass prepared from tetramethylorthosilicate.
- 12. (Previously Presented) The detector according to claim 11 wherein the acetylcholinesterase is stabilized with a sugar.

Appln. No. 10/657,249 Amd. dated December 21, 2007 Reply to Office Action of August 24, 2007

- 13. (Previously Presented) The detector according to claim 12 wherein the sugar is trehalose.
- 14. (Previously Presented) The detector according to claim 19 wherein the sol-gel is contained in a tube.
- 15. (Currently Amended) The detector according to claim 19 wherein the sol-gel <u>is in the form of particles are</u> of a size from 230-400 mesh.

Claims 16-18. (Cancelled)

at least one compound selected from the group consisting of organophosphorus and carbamate compounds which are inhibitors of the enzyme acetylcholinesterase, wherein the detector consisting of acetylcholinesterase is and an indicator that develops a color when acetylcholinesterase is inhibited immobilized in a sol-gel or in a membrane, wherein said solgel or membrane containing acetylcholinesterase is packaged in a semipermeable material that controls access of acetylcholinesterase inhibitors.